

Table 3-13b
Ecological Hot Spot Screening Levels
Based on High Toxicity Reference Value and Hazard Quotient of 1
Non-Tidal Wetland Areas - Soil and Sediment
Investigation Area H1 Feasibility Study
Mare Island, Vallejo, California

COEC ¹	Salt Marsh Harvest Mouse ² (mg/kg)	Killdeer (mg/kg)	Mallard Breeding (mg/kg)	Mallard Non-Breeding (mg/kg)	Great Blue Heron (mg/kg)	Hot Spot Level ³ High TRV, HQ=1 (mg/kg)	Hot Spot Level High TRV, HQ=3 (mg/kg)	Hot Spot Level High TRV, HQ=5 (mg/kg)	Hot Spot Level High TRV, HQ=10 (mg/kg)
Inorganics									
Aluminum	228	13764	155975	2760746	471194	228	685	1141	2282
<i>Antimony</i> ²	0.06	--	--	--	--	0.06	0.19	0.32	0.65
Arsenic	6.0	277	2730	15141	12143	6.0	18	30	60
Barium ³	292	116	905	38107	9486	116	349	581	1163
Cadmium ³	0.28	123	488	743	5740	0.28	0.84	1.4	2.8
Chromium ³	327	18	158	8600	300	18	53	89	177
Copper ³	42	289	2438	59428	4631	42	127	212	424
<i>Lead</i> ²	32	177	3062	22051	471	32	95	158	317
Manganese ³	25	663	4800	151748	248316	25	76	126	252
Mercury ³	34	0.96	8.3	557	8.1	0.96	2.9	4.8	9.6
Nickel ³	3.2	484	4636	122568	31075	3.2	9.5	16	32
<i>Selenium</i> ²	6.8	24	719	2877	2.8	2.8	8.5	14	28
Tin	12	439	1023	1087	9328	12	37	61	123
Vanadium ³	29	2545	47952	211430	62922	29	86	143	286
Zinc ³	78	476	3694	149219	3195	78	235	392	783
Organics									
<i>Total PCBs</i> ²	0.43	0.50	3.7	911	1.6	0.43	1.3	2.1	4.3
Anthracene	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene ³	1.8	0.26	7.7	30.9	5.5	0.26	0.78	1.3	2.6
Benzo(b)fluoranthene	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	--	--	--	--	--	--
Benzo(a)fluoranthene	--	--	--	--	--	--	--	--	--
Chrysene	--	--	--	--	--	--	--	--	--
Fluoranthene	--	--	--	--	--	--	--	--	--
Indeno(1,2,3cd)pyrene	--	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--	--
Pyrene	--	--	--	--	--	--	--	--	--

Notes:

-- = No TRV available for this chemical

COEC = chemical of ecological concern

HQ = hazard quotient

NA = Not available

TRV = toxicity reference value

1 - Chemicals listed in this table were identified as exhibiting at least one concentration that was considered a data outliers and/or risk drivers identified in the Baseline Ecological Risk Assessment (BERA)

2 - The hot spot screening levels for the salt marsh harvest mouse is based on the low TRV.

3 - The chosen hot spot level is the the lowest concentration of the presented criteria and is presented as a shaded cell.